It will be seen from above figures that there has not been any substantial increase in export of aluminium and its products by the above two manufacturers in 1994-95. The total indigenous production of primary aluminium has been steady. The gap bet. ween the local production and demand can be met by imports. Due to high prices of aluminium in the international market currently import of aluminium has been sluggish and the demand for ind'" genously produced metal has gone up corr. espondingly. To rectify this, import duty on aluminium was reduced from aroud 40% to 25% ad-valorem in the 1994-95 Budget. It has been further reduced in October, 1994, to a mere 10% ad-valorem. Free import of aluminium and its intermediate products has been permitted under OGL.

In addition, following decisions have been taken to increase production of aluminium 'n the country on long term basis :

(i) Exemption of aluminium metal and its down stream products from the provisions of compulsory licencing.

(ii) Reduction of excise duty on the metal and extension of MOD VAT benefits to the aluminium industry.

(in) Inclusion of aluminium industry in the list of industries where automatic approval of foreign equity upto 51% is available to enourage foreign investment in this sector.

Ambitious Programme of Kudremukh Iron Ore Company Limited

1600. SHRI G.Y. KRISHNAN : Will he Minister of STEEL be pleased to state '

(a) whether the Kudremukh Iron Ore Company Limited (KIOCL) has chalked out an ambitious programme which invol. ves entering into strategic alliances with international companies and penetrating global markets ;

(b) if so, the salient features of its diver-ification plans; and

(c) how far the Company has succeed. ed in the exploration of feasibility of gold mining in Ghana and the role likely to be assigned to the Bharat Gold Mines Limited (BGML) in the implementation of the Ghana project ?

THE MINISTER OF STATE OF THE MINISTRY OF STEEL (SHRI SONTOSH MOHAN DEV) : (a) and (b) As a. part of its diversification plans the Kudremukh Iron Ore Company Limited (KIOCL) is examining various possibilities such as entering into gold mining operations in Ghana, setting up of joint venture companies in India in collaboration with other public sector undertakings (PSUs) for providing consultancy services in the iron & steel sector, as well a setting up a plant for production of low phosphorus low sulphur pig iron.

(c) KIOCL and Bharat Earth Movers Limited (BEML), another Central PSU have concluded a Memorandum of Understanding (MOU) on 26-2-1994 to jointly explore the possibilities of gold mining in Ghana and also in other neighbouring count-rif-s in Africa. The company proposes to undertake prospecting operations in a deposit, identified in Ghana after preliminary investigations. The results of the prospecting would enable the company to take a decision on participation in a joint venture company with BEML in Ghana for mining of gold. KIOCL has availed the services of a geologist from Bharat gold Mines Ltd. (BGML) for undertaking prospecting operations in the area proposed for exploitation in Ghana. However, the entire [expenditure on preliminary investigations, prop-pe:ting/survey etc. will be borne by KIOCL and BEML.

Constitution and Function of Science Advisory Committee

1601. SHRI PARMESHWAR KUMAR AGARWALLA : Will the Minister of STEEL be pleased to state :

(a) the present Constitution and func. tions of the Science Advisory Commtttee of his Ministry and its deliberations during tho last three years;

(b) the specific recommendations/sugg-estions made by the Committee, particularly relating to the propagation and development of technology and Research and Development in the Iron and Steel industry, and on other aspects during each of the last three

I years, and steps taken by Government; and

(c) the current status of Research and Development in the Indian steel sector and separately in the Public sector Steel Plants, in terms of facilities, achievements, expenditure as percentage of turnover etc. ?

THE MINISTER OF STATE OF THE MINISTRY OF STEEL (SHRI SONTOSH MOHAN DEV) : (a) Present Constitution of the Science Advisory Committee is as per the enclosed Statement. *(See* below)

Functions of Science Advisory Committee The terms of reference of the Committee is as follows :

(i) to exmine all aspects of science and technology in the iron & steel manufacturing industry (including the preparation of raw materials)

(ii) To advise the Minister of Steel *on* the :

(1) Policies and programmes that should be pursued in developingdo* rnestic capabilities in scientific and technological research;

(2) the development of design engineering to achieve scientific excellence

(3) research in iron & steel processes and products; and

(iii) To review the progress of science and technology programme of national importance in the iron & steel industry.

Deliberations during the last 3 years

1991-92	No meeting held.
1992-93	No meeting held.
1993-94	One meeting held on 24th March, 1994.

(b) Recommendations/suggestions made by the Committee and the Steps by the Government.

In the meeting held on 24th March, 1994

Recommendations	*Steps taken by the Govt.*
A proposal to develop RESINESS Technology of Steel making with an estimated expenditure of Rs. 9 crores in a period of 4 years was approved.	Necessary orders were issued by the Government on 10th May, 1994.

(c) Current Status of Research & Development in Indian Steel Sector.

A number of National Research Laboratories and academic Institutions as well at the Research & Development Organisations of different steel plants both in Public & Private Sector are engaged in Research & Development activities about steel, The National laboratories and academic institutions primarily deal with generic items of research and help the industry with new processes and technologies for utilisation of Indian raw materials etc. The steel plants are mainly concentrating on plant specific Research Programmes to reduce energy consumption and thereby reduce the cost of production, use alternate law materials for improving efficiency of operation and for developing of newer products to broaden the market for their products. Accordingly many new products have been developed and substantial reduction of cost of production and improvement in quality has been achieved and Indian steel are now even finding acceptance in the world market.

Public sector Steel Plant like Steel Authority of India Limited, have their own full fledged, well equipped and with a reservoir of talented scientists and engineers, R&D centre at Ranchi. The main achievement of Research & Development Centre for Iron & Steel, SAIL, Ranchi, is in quality improvement, cost reduction and value added new products.

Expenditure incurred in R&D vis-a-vis turn over.

Year	Expenditure (Rs. in crores)	R&D Expenditure (as percentage of turnover)
Steel Authority of India Ltd.		
1991-92	39.00	0.42
1992-93	39.50	0.39
1993-94	39.20	0.33
Tata Iron & Steel Company Limited		
1991-92	8.08	0.30
1992-93	7.27	0.24
1993-94	10.50	0.30
Rashtriya Ispat Nigam Limited		
1992-93	2.00	0.09
1993-94	2.50	0.09

Statement

Present Constitution of the Science Advisory Committee

1. Dr. A.P.J. Abdul Kalam, Scientific Advisor to the Defence Minister & Secretary, Department of Defence Research & Development, Ministry of Defence, South Block, New Delhi-110 011.	Chairman
2. Shri Moosa Raza, Secretary, Ministry of Steel, Udyog Bhavan, New Delhi-110 011.	Co-Chairman
3. Secretary, Department of Science & Technology Ministry of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi-110 016.	Member
4. Secretary, Department of Scientific & Industrial Research & Director General, C.S.I.R., Technology Bhavan, New Delhi-110 016.	Do.
5. Additional Secretary & Financial Adviser, Ministry of Steel, Udyog Bhavan, New Delhi-110 011.	Do.

Statement—*contd.*

Present Constitution of the Science Advisory Committee

6. Adviser, (Industry & Minerals), Planning Commission, Yojna Bhavan, Sansad Marg, New Delhi-110-011.	Member
7. Chairman, Steel Authority of India Limited, Ispat Bhavan, Lodi Road, New Delhi-110 003.	Do.
8. Chairman-cum-Managing Director, Rashtriya Ispat Nigam Limited, Visakhapatnam Steel Plant, *Visakhapatnam.*	Do.
9. Chairman-cum-Managing Director, National Minerals Development, Corporation, Hyderabad.	Do.
10. Managing Director, Tata Iron & Steel Company Limited, Jamshedpur-831 001.	Do.
11. Director, Research & Development Centre for Iron & Steel, Steel Authority of India Ltd., Ranchi-834 002.	Do.
12. Director, National Metallurgical Laboratory, Jamshedpur-831 007.	Do.
13. Director Regional Research Laboratory, Bhubaneshwar-751 013.	Member
14. Director Central Fuel Research Institute, P.O. FRI, Dhanbad-828 108.	Do.
15. Head of the Department Department of Metallurgical Engineering, IIT, Kanpur-208 016.	Do.
16. Director Defence Metallurgical Research Laboratory, P.O. Kanchan Bagh, Hyderabad-500 258.	Do.
17. Head of the Department Department of Metallurgical Engineering, IIT, Powai, Bombay.	Do.
18. Chairman Mahindra Ugine Steel Company, Bakhtawar, Nariman Point, Bombay-400 021.	Do.

Statement—concld.

19.	Chairman M/s. M.N. Dastur & Company, P-17, Mission Row Extension, Calcutta-700 013.	Member
20.	Shri P.K. Mittal, Managing Director, Nippon Denro Ispat Limited, Park Plaza (1st Floor), 71-Park Street, Calcutta-700 016.	Do.
21.	Dr. N.K. Sen Gupta, Director General, International Management Institute, B-31/8 Kailash Colony, New Delhi-110 048.	Do.
22.	Shri V.S. Jafa, D-1/57, Staya Marg, Chanakya Puri, New Delhi-110 020.	Do.
23.	Shri S.R. Ramakrishnan, Flat No. 1005, Nanda Building, Kaushambi, Sahibabad, Ghaziabad (U.P.).	Do.
24.	Chairman-cum-Managing Director, Metallurgical & Engg. Consultant (I) Ltd., P.O. Hinco, Ranchi-834 002.	Do.
25.	Development Commissioner for Iron & Steel, 234/4, Acharya J.C. Bose Road, Calcutta-700 020.	Do.
26.	Joint Secretary, Ministry of Steel, Udyog Bhavan, New Delhi-110 011.	Member Secretary

Production of Hot-Roiled Coil

(602. SHRI SARADA MOHANTY : Will the Minister of STEEL be pleased to state :

(a) the total production of Hot-rolled Coil during the last three years;

(b) whether the prices of Hot-rolled Coii (H.R. Coils) have increased in the international market;

(c) whether Hot-rolled Coil produced in the country has a great demand in the international market;

(d) if so, the steps taken to increase the production of Hot-rolled Coils; and

(e) the details thereof ?

THE MINISTER OF STATE OF THE MINISTRY OF STEEL (SHRI SONTOSH MOHAN DEV) : (a) The total production of Hot Rolled Coils/skelp/strips during the last three years was as under :—

(000 tonnes)

1991-92 .'. . . 1606 1992-93 . . . . 1954 1993-94 2190

(b) Yes, Sir.